

F,
a pawl mounted to said housing for movement relative thereto;
means connected to said pawl for biasing its position;
a manually operated activator structure mounted to said housing;
an interlocking means mounted to said housing for selectively engaging said pawl for locking it against movement;
means connected to said interlocking means for biasing its position; and
linking means, having an interposed position and non-interposed position, for transferring the manually operated motion of said activator structure to said interlocking means thereby altering its engagement with said pawl, when said linking means is in its interposed position between said activator structure and said interlocking means;
wherein said linking means is gravity-sensitive to move between its interposed position and its non-interposed position as a function of said housing physical orientation.

D/
Sub
EQ
60. A gravity-sensitive latch, comprising:
a housing;
a keeper engaging member mounted to said housing for movement relative thereto;
means connected to said pawl for biasing its position;
a manually operated activator structure mounted to said housing; and
linking means, having an interposed position and non-interposed position, for transferring the manually operated motion of said activator structure to said pawl when said linking means is in its interposed position;
wherein said linking means is gravity-sensitive to move between its interposed position and its non-interposed position as a function of said housing physical orientation.

Sub F, 1
61. The gravity-sensitive latch of claim 59, wherein said linking means moves to its interposed position when said housing is moved to a horizontal position and wherein said linking means moves to its non-interposed position when said housing is moved to a vertical position.

Sub E3 62. The gravity-sensitive latch of claim 60, wherein said linking means moves to its interposed position when said housing is moved to a horizontal position and wherein said linking means moves to its non-interposed position when said housing is moved to a vertical position.

63. The gravity-sensitive latch of claim 62, also including:
a key operated lock operable between a locked position and an unlocked position; and
a locking structure connected to said lock for movement when said key operated lock is turned;

wherein said locking structure intercepts said linking means when said lock is in the locked position, whereby said locking structure fixes said linking means in its non-interposed position.

Sub F1 64. The gravity-sensitive latch of claim 61, wherein said interlocking means is pivotally mounted to said housing.

65. The gravity-sensitive latch of claim 64, wherein said linking means is pivotally mounted to said interlocking means.

Sub 66. The gravity-sensitive latch of claim 65, wherein said manually operated activator structure includes:

a handle pivotally mounted to said housing;
biasing means for biasing the handle to an outward position; and
a flange member rearward projecting from said handle and being sized and positioned to engage said linking means when said handle is manually moved.

67. The gravity-sensitive latch of claim 66, wherein said pawl is mounted to said housing for rotational movement, said pawl including:

a pair of forward extending arms for engaging a keeper in a closed position;
wherein said pawl biasing means biases said pawl to the open position; and
wherein said pawl also includes a rearward projecting arm.

68. The gravity-sensitive latch of claim 67, wherein said interlocking means is a retaining arm mounted to pivot on said housing to engage on its free end the rearward projecting arm of said pawl, and wherein said interlocking means biasing means biases said retaining arm to engagement with said pawl thereby retaining said pawl in the closed position.

69. The gravity sensitive latch of claim 68, wherein said linking means is a pendulum pivotally mounted to said retaining arm, said pendulum being operable to swing to the interposed position for abutment with said handle flange member, which movement thereby moves the retaining arm away from said retaining engagement with said pawl, whereby said pawl is free to rotate to the open position.

70. The gravity sensitive latch of claim 69, wherein said pendulum is triangular in shape, having a pivotal connection corner, a weighted corner and a flange abutment corner.

71. The gravity-sensitive latch of claim 59, wherein said keeper engaging member is a pawl pivotally mounted to said housing.

72. The gravity-sensitive latch of claim 71, wherein said linking means is pivotally mounted to said pawl.

73. The gravity-sensitive latch of claim 72, wherein said manually operated activator structure includes:

a handle pivotally mounted to said housing;

biasing means for biasing the handle to an outward position; and

a flange member rearward projecting from said handle and being sized and positioned to engage said linking means when said handle is manually moved.

74. The gravity-sensitive latch of claim 73, wherein said pawl pivotal mounting to said housing is at a first location on said pawl and wherein said linking means pivotal mounting to said pawl is at a second location on said pawl.